The Dynamics of Legitimation and the Case of the US Forest Service: A Theoretical and Historical Discussion

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#### Preface

The following report was prepared by University scientists through cooperative agreement, project science staff, or contractors as part of the ongoing efforts of the Interior Columbia Basin Ecosystem Management Project, co-managed by the U.S. Forest Service and the Bureau of Land Management. It was prepared for the express purpose of compiling information, reviewing available literature, researching topics related to ecosystems within the Interior Columbia Basin, or exploring relationships among biophysical and economic/social resources.

This report has been reviewed by agency scientists as part of the ongoing ecosystem project. The report may be cited within the primary products produced by the project or it may have served its purposes by furthering our understanding of complex resource issues within the Basin. This report may become the basis for scientific journal articles or technical reports by the USDA Forest Service or USDI Bureau of Land Management. The attached report has not been through all the steps appropriate to final publishing as either a scientific journal article or a technical report.

### I Introduction

Over the past quarter century American politics has profoundly changed. The rise of first liberal and then conservative interest groups has led to more open, more participatory, and more contentious and confusing politics (Walker, 1991). Interest groups rejected the protest politics of the 1960s in favor of professionally run organizations that put little value on participatory democracy (Berry, 1977). One of the consequences of the rise of interest groups is that government policies have become increasingly uncoordinated as Congress and administrative agencies try to meet conflicting demands. A secondary effect of the "disorder" in public policy has been a sense of crisis casting doubt on the legitimacy of governmental institutions (Freedman, 1978; Lowi, 1969).

Legitimation problems are not merely a product of the rise of interest group politics, however. In democratic systems opposition is institutionalized as part of the system, thus both diffusing and normalizing legitimation problems (Habermas, 1979). Legitimacy is a scarce resource, both necessary to make and sustain public policy and hard to come by and difficult to maintain. The history of legitimation crises can be used to track significant changes in public policies, although delegitimation is not itself the principle cause of change.

This paper will address the issue of legitimacy in regard to public policy with a special focus on the US Forest Service. Following this introduction I develop a theoretical framework in the next two sections. The third section interprets the history of the Forest Service and the conservation movement in terms of

the theoretical framework, and the final section discusses the dynamics of opposition, rationalization, and participation in regard to the issues raised earlier.

## II The Phenomenology of Legitimacy

The concept of legitimacy is often associated with the concept of authority as distinct from power.

Relationships such as teacher/ student, boss/subordinate, and scientist/ layperson come to mind, but perhaps the most common association that is made is in the political realm in the relationship between those who govern to those who are governed. It is this context, the political, with which most of what follows is concerned. However, the concept of political legitimacy resides in a broader sociological framework.

Before continuing with a discussion of the relationship of legitimacy to authority as a necessary fact of political life it will be helpful to show how political legitimacy is only a part of this larger phenomenon.

In *The Technological Conscience* Manfred Stanley (1978) develops a "person centered sociology" that argues against deterministic conceptions of social process and approaches the concept of legitimacy in light of the question, "what makes organized society possible other than the resort to physical force?" (92). Stanley gives a basic definition of legitimacy as "the sense of fitness (i.e. rightness and propriety) of one's human world. By this I mean the institutions, rules, and procedures in terms of which one discovers oneself to be related to society" (93) Legitimacy is intimately experienced as that which makes one's human world or aspects of it morally right and

fitting. As experience, legitimacy is not reducible to either just behavior or attitude, although it may manifest in both.

Stanley goes on to make two generalizations about the nature of legitimacy as experience. First, persons in every society experience aspects of their worlds as inherently right, proper, or appropriate. Second, aspects of the world so experienced have particular features such as values, legality, charisma, veracity, and so on "that appear to impart legitimacy to them as perceived wholes" (96). Legitimacy is thus conferred by persons on the basis of key elements of the phenomena they assess.

Stanley's phenomenological, person centered account of legitimacy is in contradistinction to accounts that hold legitimacy to be purely a matter of law that can be established only through rules and formal procedures (1978: ch. 4, esp. 83-91). Such accounts in philosophy and sociology rely on a sharp distinction between legitimacy, usually in reference to governmental authority, as a matter of "brute fact" and justification as a philosophical /moral rationale for legitimacy. In these conceptions legitimacy may exist with or without proper justification. The legitimacy of governments themselves results from their being the supreme power in the land. Governments attain legitimacy as a simple consequence of being in power because in the political realm supreme power is the precondition for all law in the first place.

Stanley argues that such conceptions cannot withstand closer scrutiny and are moreover dangerous and inimical to democratic values. First, the "brute facticity" thought to exist is a reification of social phenomena that are actually

in flux. For instance, law, the supposed source of legitimacy, is itself continually renegotiated and reinterpreted, and what is lawful at any given time is not necessarily certain. Secondly, if even seemingly concrete social facts such as law are in an a never ending process of flux and interpretation, the clear distinction between legitimacy and justification cannot hold. As Philip Selznick (1992) writes, legitimacy demands justification, which implies communication. Justification purely as a matter of rationale is an over intellectualized construct because it cannot fully take account of the struggle all individuals engage in to make sense of their human world's "hazy patterns of moral intelligibility (or their absence)" (Stanley, 1978:85) on the level of direct experience or in communication with each other on emotional and symbolic levels as well as the purely rational.

Finally, the conceptions of legitimacy Stanley argues against conflate into the term government what are actually three distinct phenomena: state, government, and political culture. The state as the polity with its constitution is a relatively stable composite of myth and fact while governments are merely successive administrations. The political culture is the field of "symbolic interpretations and acts" through which we recognize ourselves as a political community with a coherent present and future arising out of a meaningful past. The significance of these distinctions lies in their role in the experiences of persons as they engage in the process of legitimation or delegitimation. As members of the political community people, through their political actions and inactions, legitimate or delegitimate governments based on their apprehension of the ideals immanent in their political culture. This process may be experienced at various levels of subjectivity (e.g. direct and unreflected response, naive ideology, cultural logic, etc.) and reflects the

inherently unstable nature of legitimacy in a society composed of responsive and willful persons. Legitimation is experienced as a multidimensional process in which abstract reasoning plays only a part.

Legitimacy as it has been developed so far is a feature of a human world that is in some sense in a continual process of construction and reconstruction by the persons in it. Stanley means to show that society and social phenomena cannot ever be fully legitimated as both the grounds for legitimation and society are dynamic, interactive processes mediated through the experiences of individual persons. This conception of legitimacy is compatible with democratic ideals such as the dignity and freedom of individuals and the possibility of self determination. The rigid interpretation of legitimacy Stanley argues against, on the other hand, are compatible with ideologies that justify technologies of manipulation that seek "to get people observable to obey other people" (1978:91). The importance of a person centered phenomenological conception of legitimacy to the legitimacy problems facing the Forest Service will be addressed late in the discussion of possible responses the agency can have to its situation.

### Sources of Legitimacy and Authority

I have argued, using Manfred Stanley's phenomenological approach, that legitimation is a very general process through which people try to make moral sense of their world. This process goes beyond but also includes politics, where the notion of legitimacy is closely linked with authority. Authority is distinguished from raw power by its "rightful claim to deference or obedience" (Selznick, 1992:266). This claim of right must receive consent

from a certain class of persons though not necessarily those directly subject to the authority, such as students and prison inmates. The claim to right may be based on a variety of grounds, such as law, custom, or divine inspiration. The existence and effectiveness of authority is thus purely a matter of empirical verification: a claim to authority is rightful when it is accepted as such, whether or not this claim is justified on normative grounds. Legitimacy, implicated as it is with justification, describes the relationship between authority and consent and fulfills what Selznick identifies as a fundamental human need to govern and be governed on the basis of moral principle rather than physical or intellectual coercion (Selznick 1992:268-269). In this Selznick and Stanley are in agreement. The fundamental need to make the world morally coherent implies not only a need for understanding but a corollary need to experience important realms of life as morally right.

Stanley (1978:100-106) identifies three basic modes of deriving legitimacy: legitimacy as convention, as intellectual production, and as world coherence. Legitimacy as convention is unreflected and therefore more vulnerable to manipulation than legitimacy as intellectual production, which implies a more conscious level of justification through reason and discourse. Legitimacy as world coherence refers to the world as ordered by "thematically connected meanings" that are instantiated in concrete reality through symbolically meaningful action. The legitimacy of any particular authority, object, of other social phenomenon may be based on mixtures of convention, reason, and actions taken in the process of constructing a symbolically meaningful world.

Expertise represents a type of claim to authority that is particularly common in complex modern societies. Stanley defines expertise as "mastery of a particular cognitive area of discourse" which allows experts, under certain conditions, to interfere with the freedom of others where freedom is defined as the freedom of "every person (to be] an interpreter of the meanings that comprise the social world" (Stanley, 1978:98). There is thus a latent "universal revolt" against expertise that is expressed when expertise is not legitimated. Stanley warns that the legitimation of expertise is often accomplished in propagandistic fashion when lay persons accept a reified account of expert knowledge. The "false closure and misplaced concretness" of expert knowledge in the public mind "lends expertise an air of nonnegotiability" Stanley 1978:99) that is offensive to the dignity of individuals and can be manipulated for socially reprehensible purposes. For instance, for years the Atomic Energy Commission and Congress denied the public the right to influence nuclear energy policy because only experts were deemed competent to have a voice in these policy deliberations, regardless of the potentially catastrophic effects their decisions could have on people. The persistence of activists who insisted that nuclear policy is an inherently public issue and should therefore be openly debated, and the accident at Three Mile Island eventually led to a reform of the government's regulatory policy, including a substantial role for public participation in policy making. It should also be added that reified expertise is very risky for experts as well because evidence of uncertainty or disagreement among experts raises the specter of fraud, incompetence, or hidden agendas. Reified expertise is subject to unjustified excoriation when it is "exposed".

However, as Jürgen Habermas (1984, 1987) argues, any process of legitimation ultimately must be expressed in communication, whatever the rational, traditional, or active sources it draws on. The process of communication is how we know that authority is truly legitimate because it is recognized by those concerned as justified rather than the merely appearing to be legitimate because there are as yet no overt signs of opposition. The principle that legitimation is expressed through and therefore dependent on communication will be revisited in greater detail in the last section of the paper.

## Scarcity-And Delegitimation

Stanley (TC: Ch. 5) argues that most meanings are connected to particular objects or situations by standardized interpretations but that the range of possible manifestations of these objects and situations is so great that all meanings contain latent implications not apparent at any given time. The ability of persons to interpret meanings is limited by previously established meanings and also by "secrecy, ignorance, competitive variety among interpretations, and mystifications of discourse" (TC:129).

As noted above, the dynamic nature of social action creates a perpetual legitimation deficit; that is, there is "persistent strain toward delegitimation of [societies] established routines" (TC:131). Scarcity is the dynamic through which delegitimation occurs when scarcity is conceived of as a lack of stabilized meanings. The inherent multiplicity of interpretations that meanings contain, though limited, create a condition in which contestation over meanings, the attempt to stabilize them, becomes, from the point of

view of the people doing it, the way in which delegitimation and social change occurs.

### **III Crisis Theory**

This section I discuss Jürgen Habermas' theory of crisis tendencies in advanced capitalist societies. The intention is to use the work of one thinker who has attempted to deal with the dilemma of reconciling microsocial and macrosocial approaches to the problem of legitimation. The combination of approaches is meant to provide a framework in which the significance of events on the level of persons becomes clearer in their macro contexts.

Jürgen Habermas' analysis of crisis tendencies in advanced capitalist societies is useful in framing the legitimation problems experienced by the Forest Service in the larger of context of broad socio-historical development. In *Legitimation Crisis* (1976) Habermas develops a wide ranging analysis of possible trends in Western societies which he emphasizes needs to be tested and elaborated with empirical studies. The greatest usefulness of Habermas' work is that it provides a set of conceptual tools with which to think about the connection between legitimation as an experience on the one hand and systemic forces that in some cases bound human experience on the other. The precise accuracy of his theoretical propositions is less important than the more general point that disfunctions on the systems level may lead to delegitimation on the human level.

Habermas combines "action theory" (phenomenological, person centered analysis) and systems theory to analyze crisis tendencies in advanced capitalist societies. These societies are characterized by an interventionist state that performs many economic steering (control) functions as opposed to the noninterventionist state of liberal capitalism. Habermas and Stanley are in agreement that legitimacy is a sense experienced in what Habermas calls the "life-world" in which symbolically constituted normative structures, values, and institutions form the meaningful reality experienced by persons.

Alongside the lifeworld is the social system, which Habermas divides into economic, political-administrative, and socio-cultural subsystems. Systems are self regulating entities integrated by steering mechanisms. While the nature of social systems is to be self regulating, Habermas argues, like Marx, that they may contain contradictions, or conflicting imperatives, that can cause systemic disfunctions and if they cannot be sufficiently mitigated, crisis. Crises may lead to the evolution of key system characteristics such that a new system has emerged. It should be noted that Habermas does not view the crisis tendencies inherent in capitalism in apocalyptic terms but rather as opportunities for social learning.

There is not necessarily a line of causation between the lifeworld and the social system, so unlike Marx,

Habermas does not think that social structures like the forces of production determine other social realities.

Lifeworld and social system are connected though by what be calls "goal values" which are set by both the

"cultural values of the constitutive tradition.... and the nonnormative requirements of system integration"

(LC:7). Goal values pertain to the goal state which the system tends to attain and maintain. This goal state

has variables that characterize the system, the values of which must fall into a range of toleration if the goal state is to be maintained. The tolerable range of goal values is determined by a "principle of organization" that is the essential structural feature of a system conceived in a historical, evolutionary context, that gives it a coherent identity. Habermas identifies the principle of organization of primitive societies to be the primary roles of kinship relations, for traditional societies to be political class rule, and of liberal capitalist societies to be unpolitical class rule in the form of the relationship between wage labor and capital.

The central argument in Legitimation Crisis is that because of inherent tension of social production for non-generalizable interests in late capitalist societies there are crisis tendencies inherent in the system as a whole. While these tendencies can be compensated for at the subsystem level mitigating actions taken within any one subsystem displace the problems into another subsystem, which then becomes vulnerable to crisis. The entire social system is thus characterized by a nesting of multiple crisis tendencies that, as I will explain, converge on the administrative subsystem.

The crisis tendencies of the market economy are addressed through government intervention on two levels, macroeconomic management that dampens the fluctuations in the economic cycle (e.g. monetary policy, subsidies, price guarantees, etc.), and creation and improvement of the conditions for accumulating capital (e.g. investment in science and technology, education, infrastructure, welfare, forest management). The socio-cultural system produces the legitimation needed for the system to function. While under liberal capitalism there had been what Habermas

terms a *decoupling* of the legitimating function of the socio-cultural system from the economic system, the administrative intervention of advanced capitalism recouples politics and economy. In other words, functional weaknesses in the market economy necessitated the creation of the administrative state which politicized the economy because it lost its nature like appearance in which it legitimated itself. Because capitalistic societies have developed universalistic belief systems of rights, including civil rights, legitimation must be secured through democratic processes. Citizen participation in political action in which basic social structures were revealed through what Habermas calls discursive will formation (see also Stanley, 1990) would imperil the social system by revealing the inequality of administered collectively production and the appropriation of surplus value by private interests. Therefore, advanced capitalist societies develop systems of formal (e.g. voting) democracy rather than "substantive" democracy in which all social institutions are democratized (LC:34-37).

The administrative-political system requires inputs of mass loyalty from the socio-cultural system while its outputs are autonomous administrative decisions. Output crises are manifested as rationality crises, meaning the administrative system cannot perform its function for the economy. Input crises are manifested as legitimation crises when mass loyalty is withdrawn. Rationality crises are displaced economic crises which then produce legitimation deficits. A legitimation crisis does not directly affect the economic system but it throws the political system into turmoil by placing demands on it that it cannot meet.

The displacement of economic crisis tendencies into the administrative system has several possible effects. The administrative system represents a class compromise that allows it to assume certain limited planning functions in order to prevent economic crises. However, it now is in the position of being a collective capitalist with a primary interest in maintaining the whole system, and is therefore in competition with various individual capital interests. The political system can expect multiple and contradictory pressures from individual capital interests for favorable treatment, thus injecting the probability of irrational planning strategies. The political-administrative apparatus is also burdened by a propensity for inflation and chronic budget deficits (LC:61-62)

Rationality deficits have been described as the displacement of the chaotic nature of the market into the administrative apparatus. This may occur because the administration lacks the required information it needs to make planning decisions, and in response relies on client industries for information. It then develops close relationships with industries, losing its independent decision making capacity. Sectors of the economy thus capture sectors of the administration. There now arise contradictory demands on the administration. First, it is required to act as a collective capitalist for the good of the whole economic system, but then is faced with the task of having to usurp the right of individual capital interests to make independent investment decisions for the general good of the system (e.g. regulating private timber), thus threatening the identity of capitalism itself. Or the administrative system acts on behalf of particular capital interests (many of which are at cross purposes with each other and acting through their proxies in different agencies), reproducing the anarchic and often socially destructive

tendencies of the free market in its policies. According to this logic, administrative agencies can be expected to vacillate between a desire for nonparticipatory rational comprehensive planning and a propensity to side with individual capital interests and produce confusing, inconsistent government policy (LC:62-63).

Habermas argues however, that the displaced economic crisis may not cause crisis in the political-administrative system because administrative problems are more easily managed than economic breakdowns such as high rates of unemployment and bankruptcy. It is not obvious what is the range of toleration for administrative disorganization, expressed as policy failures (rather than nature-like systemic catastrophes). Also, the state can co-opt its clients by showing them the constraints on policy it faces and working towards compromise policies. The capacity of the state to rationally incorporate crisis avoidance strategies into its policies in an adaptive fashion diminishes the likelihood that problems will exacerbate into full blown crises unconsciously.

Habermas is asserting that economic crisis tendencies can be contained and managed by the administrative apparatus but that this can produce unique crisis tendencies that arise from the political-administrative system itself. First, the fact administrative intervention and management of the economy means that the economy can no longer be depicted as an autonomous, self-legitimating system to those who are victimized by economic growth. The demands from these people (in the form of unemployment compensation, social security, welfare, health insurance, and so on) may either produce large

budget deficits or require high taxes. In either case, economic growth is adversely affected (LC:64-65).

Even if these problems are averted, other challenges develop within the administrative system itself. For example, "foreign bodies" may enter the government in the form of investment policies made on the basis of political rather than economic considerations, and oppositional, radical professional groups who capture parts of government. The latter might include social workers whose work leads to the political empowerment of their clients, health professionals hostile to the interests of industry, or environmentally friendly scientists hostile to destructive exploitation of land and resources. Another source of rationality crisis tendencies may be the growth of groups who do not participate in the labor market and may thus also, like the radical professionals, develop ideologies not compatible with the capitalist system. These groups include students, welfare recipients, and criminals. All of these phenomena tend to generate the growth of demands on the government that cannot be met. The result is that the political-administrative apparatus may experience a massive withdrawal of legitimation. Rationality crisis tendencies are then expressed as legitimation crises (LC:66-67).

Because administrative intervention increasingly encroaches on areas of life once left to the cultural system the demands made on the government may become too burdensome or contradictory. Administrators may then experiment with expanded participation opportunities of those affected by their decisions, but this may raise further problems stemming from the tension between two contradictory motives: "excessive demands resulting from legitimation claims that the administration cannot satisfy under

conditions of an asymmetrical class compromise [such as dramatic increases in welfare support]; and conservative resistance to planning, which contracts the horizon of planning and lowers the degree of innovation possible" (LC:72-73). Habermas claims that both of these motives can be expressed simultaneously, resulting, for instance, in phenomena such as rural wise use movement activism for both state subsidized resources and industry and withdrawal of state planning and regulation authority. By Habermas' account, then, greater participation in planning involves serious risks as well as opportunities for legitimation because participation at this level cannot overcome the inherent problems associated with an administrative system informed by a need to promote economic growth for the advantage of private interests that cannot be generalized among the population.

Legitimation crises can be avoided if the growth of demands on government are kept within the range of what the government can actually deliver. This depends on the generation of the proper "motivations" in the cultural system, and here is the root of Habermas' claim that legitimation crisis are the form of crisis that come to characterize advanced capitalist systems. Although the administration encroaches on areas of life that were once left to the cultural sphere, it cannot regulate cultural development to suit its needs. That is, the evolution of the symbolically ordered realm of culture cannot be determined by the needs of any other subsystem. Further, the displacement of economic crisis to the administrative system, and the displacement of rationality crisis to the cultural system as legitimation deficits produce motivational changes in the cultural system that are antithetical to the system integration requirements of the other subsystems, thus greatly increasing the likelihood that legitimation crises will occur.

The two patterns of motivation the cultural system must produce to insure system integration in advanced capitalism are civil and familial-vocational privatism. The former refers to an ethic of general interest in politics that stops short of a desire for intense participation and the latter refers to a lifestyle oriented towards familial leisure consumption and careerism. Habermas argues that both motivations are being undermined and cannot be replaced by functional equivalents. The motivations supportive of the social system are based on a mixture of traditional and bourgeois values and norms. He develops an intricate argument in support of both of this theses a main features of which is that the rationalization of greater areas of life is, as Weber claimed, undermining traditional values on which norms supportive of the social system are based. Phenomena such as high rates of divorce, civic apathy, and radically alternative life-styles are consequences of this trend. Key features of bourgeois ideology are also being undermined, notably possessive individualism, orientation to exchange value, and achievement ideology. Possessive individualism is undermined as the state provides infrastructural, educational, and personal security (such as health care) services. The orientation to exchange value is undermined because of the increasingly large numbers of people, especially those residing in a permanent unemployable underclass, are no longer being socialized by the market. Achievement ideology, the work ethic, is undermined by a growing realization that even with hard work the risk of personal failure in the market is high. Administrative interventions exacerbate this trend because they create demands for wealth redistribution and raise the level of education such that personal ambitions cannot be met by the opportunities in the labor market.

Habermas believes that the social system continues to need these motivational patterns that are being undermined. He also sees evidence that the political and social trends since the 1960s, closely linked to the pattern of administrative incursion into formerly autonomous cultural realms, are producing organized groups of people (e.g. environmental and women's movements) that are demanding rational justifications for social practices that serve mainly private interests.

To summarize, Habermas' argument develops three central theses. First, economic crisis in advanced capitalism is averted by administrative intervention that moderates economic cycles that could otherwise bring the social system-to crisis. The consequences of the shift from a self-regulating market economy to a rationally steered economy include rationality deficits in the administrative system as it experiences policy failures and as it becomes clear that the state is acting in the name of the public interest for the benefit of private interests. The legitimation crisis tendencies that result from this are exacerbated when oppositional groups enter the government itself and when intervention strategies intended to replace economic crisis actually fail (e.g. the conservative claim that welfare policy in the United States has failed). A legitimation crisis may occur when the demands put on government exceed its ability to meet them. The legitimation crisis tendencies are bounded on the one hand by the government's ability to pay and on the other by motivations supplied by the socio-cultural system. Because the process that is at work here is a diminished capacity of the socio-cultural system to independently produce meaning that is essential to system integration Habermas claims that "the substitutive relation between the scarce resources [of] value and meaning... is therefore decisive for the prediction of crisis"

(LC:93). The more the socio-cultural system fails to generate the motivations necessary to meet social system needs "the more must scarce meaning be replaced by consumable values" (LC:93). Since the socio-cultural systems capacity to generate the required motivations is steadily eroding and the government's ability to pay is limited by the economic system's need to grow, legitimation crisis becomes a permanent feature of advanced capitalist societies.

Habermas does not predict that legitimation crises will necessarily lead to system transformation. The political-administrative system may well be capable with a mixture of long term planning and adaptive reaction to manage legitimation crisis tendencies for an indefinite period. Thus, the usefulness of Habermas' work is not in predicting when or whether there will be a change from advanced capitalism to another social system. Rather, it is in helping us recognize pervasive trends in these societies. His analysis is thus only provisional and because it is not based on extensive empirical research, likely to require extensive modification and elaboration when particular cases are examined.

## IV A History of Conservation and the US Forest Service to World War 11

The history of conservation and natural resources management exemplifies both the dynamics of legitimation and the broad social trends of the twentieth century. The conservation movement was a part of the turn of the century Progressive Era's reaction against what was perceived to be the anarchy, wastefulness, and general social corruption of the unregulated, free market

development of industrial capitalism in the nineteenth century (Hays, 1959; Wiebe, 1967). Unconstrained capitalism was seen by the Progressives to have brought social problems on a vast scale. Progressives believed that the new economic and social order could be good for society, but that it had to be brought under rational control by administrative and political reform. Administration meant rationalization, and rationalization was linked with science. Scientific administration was for its most enthusiastic proponents more than just a pragmatic program but a way to eliminate society's problems by rationally controlling and planning social development. Uncertainty and the waste of resources that unregulated markets produce could be eliminated through the application of scientific knowledge and methods to practical problems. In the context of advocating natural resources conservation one Progressive conveyed the sweeping aspirations of the movement:

The Millennium will have been reached when humanity shall have learned to eliminate all useless waste... When humanity shall have learned to apply the common sense and scientific rifles of efficiency to the care of body and mind and the labors of body and mind, then indeed will we be nearing the condition of perfect (Quoted in Hays, 1959:125).

In less utopian language, Hays describes the movement of conservation in terms of "the role it played in the transformation of a decentralized, nontechnical, loosely organized society, where waste and inefficiency ran rampant, into a highly organized, technical, and centrally planned and directed social organization which could meet a complex world with efficiency and purpose" (1959:265). In regards to natural resources, because conservation of some resources was linked with the creation of permanent federal land reserves, the issue of use has often been mistaken for an issue of

ownership. Conservation was grounded in the "gospel of efficiency", which meant efficient use, not in an ideology of public ownership for the sake of egalitarian or anti-capitalist purposes. The homesteaders who vehemently opposed federal reservations at the time recognized were not slow to recognize this (Hays, 1959:264). Rather, conservation was meant to be a means through which maximum sustained economic growth in the resource production sector of the economy could be achieved. Efficiency entailed consolidation and rational planning, goals that fit nicely with long term corporate needs (Hays, 1959:264-265). The ideology of conservation echoed the utilitarian creed that the public good consisted of the greatest good for the greatest number, and that new trained professionals could through the use of science direct society toward this goal.

In practice, the inherent political difficulties of implementing a comprehensive reform program were immediately manifested. For local resource users conservation was an issue comprehensible in terms of their lifeworld experiences. As Hays notes, "They understood little and cared less for the needs of the nation as a whole" (1959:272). Moreover, local users reacted against the technicist claims of the new resource experts with predictable revulsion. As Stanley stated, the claim of a right "to intervene in the freedom of other agents" (1978:98) on the basis of having mastered a cognitive field of discourse is likely to be opposed by people who think they understand their world well enough to get along. In other words, on the local level the conservation program experienced an immediate legitimation deficit.

Resource users organized around single resources and through Congress

gained some control over appropriations for resource development projects. The resource management regime that developed was based on a relationship between Congress, the agencies that specialized in single resources, and local interests, with sometimes more and sometimes less friendly relationships between agency and industry. Thus, while the tension between the need for comprehensive planning for economic efficiency and the local desire for participation was recognized by the conservationists at the time, it was a contradiction they could not resolve (Hays, 1959:275).

In the Forest Service's case, its early history is marked by countervailing tendencies as it tried to forge an identity and mission for itself. Forestry as a profession developed around the idea that lumbering had to be made efficient to prevent the "timber famine" that seemed to be looming over the near horizon (Clary, 1986:Ch.1; Hirt, 1994:Ch. 2). Bernard Fernow, the second chief of the Division of Forestry (the forerunner to the Forest Service in the Department of the Interior) believed the government's role in the forest products sector of the economy should be limited simply to withholding public timber to stabilize the market (Steen, 1976:38). Over the next several decades the Forest Service developed a more complex mission as a land management agency, promoter of professional forestry practices, and advocate of cooperative management with private industry and the states, and eventually proponent of industry regulation and a national plan for forestry. Before the end of the World War II the Forest Service's land management activities were relatively small in scale and the greatest significance of the federal timber lay in its having been set aside as a reserve source for when private forests could no longer meet demand. But while the federal forests were meant to provide relative stability of supply, the Forest Service also

sought to rationalize management practices on other lands as well as to bring some predictability to local economies that suffered under the boom and bust cycles of the timber industry. The first cooperative venture was launched in 1898 in which the Forest Service gave technical assistance to private owners and helped them develop management plans (Steen, 1976:54). The Weeks Law of 1911 initiated the period of direct federal funding of state and private forestry (Hirt, 1994:203; Steen, 1976:130). The Clarke-McNary Act of 1924 expanded federal cooperation with nonfederal forestry entities, made matching funds available to states for forestry programs on state and private lands, and made money available for cooperative reforestation ventures with states and private owners (Hirt, 1994:203; Steen, 1976:189).

In 1933 the Forest Service issued the Copeland Report which it hoped would be the basis for reform of Clarke-McNary. The Copeland Report is notable because it was internally produced and shows the scope of the agency's ambitions at the time. The report asserted that "practically all of the major problems of American forestry center in, or have grown out of, private ownership" (quoted in Steen, 1976:202). As a first step the report recommended large additional federal land acquisitions. The Service was then eventually to control fifty percent of the supply market and regulate private forestry practices. Its advocates foresaw a law issuing out of the recommendations in the report that would constitute "a single national plan for American forestry" (Steen, 1976:204). Management and planning under the new law would be comprehensive and geared toward integration of resources, including timber, water, range, recreation, wildlife, and other programs (Steen, 1976:202). The leadership of the agency attempted to mobilize broad support for such a bill within the agency and throughout the

forestry community, but a bill was not passed. The Forest Service did not abandon its efforts to gain regulatory control over industry, however, and in 1940 sent another set of recommendations to Congress which included both cooperative and regulatory components. The principle aim of the recommendations was the enactment of a bill that would give it authority to finally rationalize private forestry practices, preferably through stringent regulation, but again there was no Congressional action.

Before the end of the war, Congress did pass a bill that is significant not so much for what it accomplished but for the concepts it embodied. The 1944 Sustained-Yield Forest Management Act authorized the creation of sustained yield management units, which were divided into two classes. One type of unit reserved federal timber in a particular area for harvest by local outfits only with the aim of stabilizing local economies. The other type of unit would be composed of federal and private lands that would be managed jointly as a single property (Steen: 1976:251).

The early history of conservation and of the Forest Service until the end of the war can be interpreted in Habermasian terms as follows. Like comparable movements in Europe, the Progressives recognized that liberal capitalism had produced unwelcome and potentially socially unbearable effects. The invisible hand was visibly uprooting communities, throwing large numbers of people out of work during cyclical economic downturns, causing urban misery, and undermining the long term productivity of the land by wantonly exploiting resources. Rather than working mysteriously for the greatest good for the greatest number, the aggregate activity of individual capitalists was undermining the long term capacity of the economy to grow. Their response

was to begin instituting the reforms that would eventually lead to a mature administrative government during and after the New Deal.

After World War II and especially in the 1950s the tempo of timber cutting on the national forests increased dramatically. Under the direction of a new chief in 1952 the agency also dropped its campaign to regulate the timber industry, adopting a program of cooperation "as the best means to serve the public interest" (Steen, 1976:271). The push for regulatory authority could not be maintained during what was shaping up as a conservative period under President Eisenhower, who strongly opposed expanded Forest Service control over private capital (Clary, 1986:150). The agency thus gave up its quest to be a collective capitalist and developed a very close and collaborative relationship with the timber industry.

The increase in timber production meant that the agency could no longer successfully represent itself as a neutral arbiter of private interests for the public good. The Forest Service had won a large store of public trust and legitimacy by both providing recreational opportunities for anyone who cared to use the forests for camping, hunting, fishing, boating and so on, and by mounting successful public relations strategies depicting itself as a defender of the public interest like the Smoky Bear campaign as well as its long-standing campaign against "destructive" (i.e. inefficient and wasteful) logging (Clary, 1986:152). The nonconsumptive users of the forest could however increasingly see the effects of logging on the national lands and to them it looked a lot like the destructive logging they had been hearing the agency rail against for years (Steen, 1976:302). Moreover, citizen based groups like the

Sierra Club were now organized to lobby for values such as wilderness and wildlife (Clary, 1986:152).

The Multiple Use-Sustained Yield Act of 1960 simultaneously represented the new problems the Forest Service faced and an attempt to deal with them. The act, which the agency supported, gave the Forest Service a Congressional mandate to manage timber, wildlife, range, water, and recreation on its lands without special preference for any resource. However, after the act was passed, the agency pressed hard to increase the timber cut from its lands (Clary, 1986:170) while trying to use the principles of the act to resolve conflicts over resource uses (Steen, 1976:309). As opposed to previous attempts to do integrated management and comprehensive planning, the new act represented an attempt do deal with a legitimacy deficit rather than a rationality deficit. That is, while proposals such as were contained in the Copeland Report were part of the agency's drive to rationalize the forest sector of the economy the Multiple Use-Sustained Yield Act was an attempt to mitigate the legitimation deficits the agency incurred among the nonconsumptive users of its lands. In both cases, the goal was to apply a technical solution, but in the first case it was a technical solution to an economic problem, in the second to a social problem. Economic problems displaced to the administrative system had by the 1950s already become rationality problems which manifested themselves in the socio-cultural sphere as legitimation problems.

The Forest Service's early attempts to rationalize the forests products sector of the economy by controlling the market and regulating private industry failed to win legislative approval. The generalizable benefits to the economy that

may have been gained were inimical to a large enough part of the industry to deny the agency the opportunity to try its luck as a truly collective capitalist. Relegated to its more modest role, the agency gained favor with the industry but the costs of this arrangement were widespread delegitimation. In Habermas' terms, the socio-cultural system would no longer supply the motivations necessary to prevent legitimation deficits from becoming severe. Citizens who organized around specific concerns demanded justifications for practices that could not easily be justified in terms of the public good, and yet that is what the agency had to do. Worse yet, from the agency's point of view, organized citizen groups and economic interests used the fractured American political system to impose wildly inconsistent legal mandates on the agency. The last decade has proven conclusively that the Forest Service cannot maintain a high timber output, keep locally dependent timber communities economically stable, protect endangered and threatened species, maintain ecological balance on its lands, and provide for all the other resource uses in demand all at the same time. Attempts to do so by instituting more comprehensive, more rational, centralized systems for long term planning were set up for failure from the start (Cortner and Schweitzer, 1981). Incorporating environmental values through the planning processes of the National Forest Management Act and the scoping processes of the National Environmental Policy Act could not resolve the fundamental dilemma of having to provide mutually exclusive services in a political environment in which organized interest groups were increasingly able each to exercise veto power over decisions. That is, to convert delegitimation into effective political action.

At the same time, the Forest Service experienced internal disintegration. Laws like the NFMA led to the hiring of professionals who did not share the values of the foresters who ran the agency and who had shaped its institutional priorities over decades. These "foreign elements" only exacerbated the crisis of rationality in the agency, and further diminished the agency's legitimacy. Biologists, ecologists, hydrologists—the ologists—had values and loyalties that did not fit with the priorities or culture of the agency (Flirt, 1994:281-288) and they joined the interest groups that assailed the agency in questioning not merely the means of achieving policies, the classic level of bureaucratic controversy, but the goals of policy. An association of dissenters formed under the name of the Association of Forest Service Employees for Environmental Ethics (AFSEEE). To the extent that a floundering agency cannot hope to recover public legitimacy when it faces internal revolt, by the time AFSEEE was founded the Forest Service had truly experienced a "legitimation meltdown" (Campbell: 1987).

Since the early 1960s the contradictions built into the Forest Service administration have worked themselves out on a seemingly inexorable trajectory until the present in which, with few friends, it faces steep reductions in personnel, budget cuts, a morale crisis, and an inability to figure out what mandate, if any, it still has as a federal agency. The question is not, can the Forest Service modify its goals and its practices to fit a new environment; that is, can the agency enter more variables into more comprehensive, more inclusive, more integrated management and planning activities. The attempt to deal with conflicting mandates and conflicting user groups by increasing the technical sophistication of multiple resource management and planning was not successful. Equally futile, however,

though perhaps not as obvious, will be any attempt to use the same methods to settle disputes even when the focus on timber has been removed.

Forest Service policies have been attacked for being ecologically unsustainable, socially undesirable, and economically irrational (Hirt, 1994:233), in short, politically untenable. It will be a matter of time to see if the agency can successfully "reinvent" itself to deal with a political environment that may be telling it that it has become obsolete (Drucker, 1995). However, it should be kept in mind that the Forest Service is in any case a part of the federal administrative system, and as such is suffering from the consequences of the larger system wide legitimation problems. Habermas' analysis of crisis tendencies are best seen not in the context of a single agency, which may in some way mirror the tendencies of the entire system but also deviate in particular ways, but in the context of the entire apparatus of administrative government. Habermas paints a picture in which the administrative system must perform tasks which it is almost certain to fail at in lesser or greater degrees, cannot receive legitimation for if its real function is revealed, but also suffers delegitimation if it stops doing what its doing. In Peter Drucker's words, "As the new Republican majority is soon going to find out, neither maintaining not curtailing the nanny state is acceptable to the public" (Drucker, 1995:61). Habermas traces these contradictions back to the basic class antagonisms of capitalism while other analysts believe it is simply inherent in complex modern societies of any kind. In either case, the long term viability of organizations like the Forest Service is certainly questionable. Before going on to the agency's attempt to invent a new management paradigm with which to address its problems I

will briefly discuss the interaction dynamics of opposition, rationality, and participation.

Habermas only discusses one capture specific scenario in which elements of the administrative system become "privatized" because they must rely on capital interests for information they need to make plans. As opposed to the parliamentary political systems of Europe, the divided government of the United States allows the Congress to exercise considerable control over agencies, and as discussed above, it was through Congress that particular capital interests were initially able to gain leverage over the agencies. Because of the multiple access points to government open to citizens and organized interests localized episodes of delegitimation have potential to reverberate through government and lead to changes in policy and organization that would not be possible in a parliamentary system. U.S. agencies are therefore more subject to being permeated by foreign and oppositional elements than their European counterparts, and more likely to produce the policy incoherencies that make rationality, and subsequently legitimation, crises possible.

The Forest Service displayed the vacillation tendencies that Habermas states administrative agencies are prone to. On the one hand it developed a primary focus on the timber resource and entered into cooperative agreements with private timber operators, especially on the local level. On the other hand, those parts of the agency that sought greater decision making autonomy and an enhanced capacity to assume control of the forest products economy for the sake of efficiency proposed comprehensive planning and management regimes. These proposals can be seen as the agency's attempt to

avoid the rationality problems associated with becoming a representative in government of a single capital interest.

# V Opposition, Rationalization, and Participation

In this section I will discuss the relationship between opposition, rationality, and participation. I will put this discussion in the context of the Forest Service's history, which I divide into three periods. To each period I will attach a metaphor that indicates or embodies certain dominant characteristics of the Forest Service and how it related to its environment at that time. The periods are broad and overlapping, and for the purposes of this discussion countervailing -tendencies within the agency will not be taken into account.

The first period, which I will call the Reform Period, begins with the creation of the Division of Forestry in 1881 and lasts until the early 1950s when the quest to gain regulatory authority over industry was dropped. This was the period in which brought the interrelated establishment and development of forestry as a profession and the growth of the agency. By using reform as a metaphor I mean to evoke its spirit of outward direction, its aggressiveness and orientation towards change, and the security of its epistemological stance. The environment towards which the agency was oriented was inefficient, wasteful, and unstable because of qualities inherent in the market economy the way it was organized at that time. Rationalization therefore meant a focus on what Weber called material, or substantive rationality--bringing social arrangements into alignment with the stated purposes of the society (Freedman, 1977:97-98). Of course, in launching their program foresters helped construct what those purposes were or should be, but framed in the

language of long term economic growth and the likelihood of a timber famine they were able to draw from values and symbols that were widely accepted and meaningful in the society. If a substantive irrationality provided the impetus for forestry its methods would be formally rational, that is, geared to making instrumentally efficient decisions. Instrumental rationality is a technical art and is closely allied with science which serves as the epistemological basis on which to act. Foresters thus viewed themselves as unselfish and uniquely qualified to both identify desirable social ends and the means to achieve them. It was perfectly consistent with this conception of rationalization that "They were accordingly inclined to keep their own counsel" (Clary, 1986:28).

The agency faced two main sources of opposition during this period that were associated with its program of rationalization. First, localities resented the agency's acquisition of land and resisted its authority. Part of the local reaction is attributable to fear that the land reservations would constrain local development (Clary, 1986:25), but it also reflected the "universal revolt" potential against an usurpation of individuals' freedom "to interpret ... the meanings that comprise [a part of] the social world" (Stanley, 1978:98) by an expert cadre who people have not been socialized to accept as a legitimate authority. The Forest Service recognized a need to "win over" the local communities; that is, to receive a level of consent that would allow them to pursue their project. It did this by offering the communities "free use" of national forest timber as well as by working actively to promote the development of local forest products economies (Clary, 1986:25). In Habermasian terms, the agency won consent by replacing meaning, locally determined, with value.

The opposition the agency faced from industry stemmed first from its campaign to institutionalize forestry in the private sector, which the industry believed for economic reasons was "impossible to apply" (Clary, 1986:18). Industry later opposed the agency's efforts to gain regulatory authority as part of its goal of instituting a comprehensive plan for the forest products sector of the economy. The industry viewed the regulation issue as more than a threat to the profits of particular firms but to the system of capitalism itself (Clary, 1986:105-106). While the agency could draw on the rhetorical strength of populist resistance against big business, the industry could draw on the rhetorical persuasiveness of comparing the agency with socialistic and totalitarian movements abroad in the world (Clary, 1986:108).

To sum, during the Reform Period the Forest Service acted out of a rationality that entailed both material and formal components that led it to take a prescriptive stance towards forest users. Non-expert participation in decision making could only be seen as an irrational contamination. Local participation then had to be informal and cooperative but framed by rules and objectives the agency set. Opposition from communities was contained by replacing lost meaning with value. It developed an often antagonistic relationship with industry because of its efforts to assume regulatory control over its sector of the economy. Because from the agency's point of view its legitimacy derived from its ability to use scientific knowledge to solve social problems it perceived as urgent it saw no moral need to appease the industry.

The Maintenance Period begins in the early 1950s and lasts until the middle 1980s. Maintenance is inwardly oriented, is conservative, and defensive

rather than offensive when attacked. This period marks the end of the agency's preoccupation with substantively rational goals. It no longer sought a comprehensive national plan for the forest products economy, which meant it dropped its efforts to regulate the industry. Rather, in this period the Forest Service developed a dose and cooperative relationship with the industry. Rationalization now meant not a quest to efficiently correct social problems but to efficiently produce commodities in order to meet the needs of industry and to further its own organizational interests. The moral claims the agency could make then were greatly reduced to providing services and products in the public interest. The agency developed increasingly efficient means to achieve its goal of cutting the maximum sustainable yield of timber from the national forests.

During this period the agency was attacked on the grounds of substantively rational arguments by environmentalists who succeeded in gaining a substantial number of allies in Congress and getting the environmental laws of the 1970s passed. As I have discussed, the new laws such as the NFMA, both reduced the agency's discretionary authority by prescribing specific management practices and instituted mandatory public participation processes. Using principles of pluralistic government, coherence and the settlement of conflicts was sought in the inclusion of all views through compromise and long range planning. However, the NFMA has not in the end solved any problems. The vast majority of forest plans have been appealed, some have gone to court, and in spite of some successes in working together with citizens (Shannon, 1987) the agency could neither settle disputes or solve its legitimacy problems through public participation.

These failures can be attributed to at least several factors. First, the agency interpreted the law in such a way that allowed continued high timber harvest levels, including increased cutting of old growth trees (Hirt, 1994:265). The agency was also under pressure from successive administrations to produce high volumes of timber, and had high timber targets imposed by Congress. Rather than bring coherence, the pluralistic process produced an unimaginably confusing system in which the agency could not meet its conflicting legal obligations while citizens and interest groups could appeal its decisions administratively and in the courts.

While some of the forests did work successfully with citizens in co-producing forest plans (Shannon, 1987) the public participation process was not conceived or interpreted in a way that could manage the conflicts around resources. Overall, participation was used as a means to appease citizens and interest groups. A conservative stance towards participation may include a recognition that participation can be used to make planning more rational by fostering loyalty, including more information in plans, and serving as an early warning signal for potentially troublesome issues. But to the extent that citizens and interest groups are asked merely to present views (the public hearing method) but are not involved as co-creators of plans, they do not have a stake in the product and feel free to exercise what may amount to veto power through appeals and suits. Appeasement is a strategy that is soon recognized. On the other hand, as I will discuss below, more collaborative participation is not necessarily a better alternative.

There are also problems inherent in the comprehensive planning concept itself. As Cortner and Schweitzer (1981) point out, rational comprehensive

planning is most likely to succeed when "a complete and accurate understanding of the present situation exists ... the future of concern is short term ... the criterion of desirability is obvious and simple to apply ... and events can be tightly controlled" (204-205). These conditions either cannot be satisfied or, in the case of concern for the short term only, are contrary to the requirements of the law. Administration is always faced with unforeseen and enforceable events and consequences of its own actions. Comprehensive planning, which by definition seeks to deal with many interrelated problems simultaneously, can overload the information processing capabilities of an agency.

Another and equally difficult problem with comprehensive planning is shared with any other technically driven attempt to solve resource issues. There is often an implicit and sometimes explicit assumption on the part of organizations like the Forest Service that if only enough scientific knowledge were brought to bear on a problem that the solutions would present themselves and, moreover, that the contending parties might be persuaded by the science. At the very least the parties could agree on the "facts", even if they differed on "values". This is almost never the case in a pluralistic political system, and the reasons are quite simple. Science continues to be attached with certain myths, notably that science yields truth, that experts can be expected to agree, that science is unitary, and that scientific ideas will not be influenced by the use to which they will be put. In each case, the exact opposite is true. Science's findings are provisional, temporary, and socially negotiated theories that are open to challenge and by science's own standards should be challenged. Furthermore, experts should be expected to disagree; science is divided by disciplines, "paradigms", and other cleavages; and,

especially in policy contexts, scientific ideas are profoundly shaped by the uses to which they will be put (Collingridge and Reeve, 1986).

None of these facts are particularly problematic until science is used in policy to justify decisions. When controversial issues are dealt with scientifically by agencies the interested parties almost invariably develop, in house or from external sources, their own counter arguments. Because scientific claims can almost always be contested, either on substantive or methodological grounds, the interest groups can mount a very effective campaign to discredit their opponents. The more controversial an issue, the more opponents will invest in contending the science—on scientific grounds (Collingridge and Reeve, 1986:31). Policy choices thus devolve into technical debates that are extraordinarily difficult and often impossible to settle on technical grounds and that obscure the social issues embedded in them. The myths of science work to discredit all sides in the debate and science generally in the eyes of the public, which can only surmise that either the scientists don't know what they are doing or nefarious motives are at play. The dilemma for agencies is that many issues are in fact technically complex and should be scientifically informed.

This brings me to the present period of the Forest Service's history, which I will call the Learning Period.

Learning is characterized by uncertainty and openness, and is both inwardly and outwardly focused. While learning can be a hopeful period, it does not necessarily lead to positive change because it only recognizes a need. There is no assurance that effective learning, leading to adaptation, will take place, and there is no assurance that even if learning takes place that it will make any difference.

Hope for the Forest Service at the moment lies in the emerging philosophy of ecosystem management.

Ecosystem management should be recognized as both an opportunity and a temptation. The temptation of ecosystem management is to fashion it as another incarnation of rational comprehensive planning and management. Faced with resource problems and social conflicts that in most cases have not neared resolution yet planning and managing at an ecosystem level are attractive ways to rationalize the agency's operations.

There is an inherent logic to ecosystem management that implies a need for centralization and coordinated management that looks similar in form to the RPA/NFMA planning design. Comprehensive management and planning at the ecosystem level cannot resolve any of the problems of the past. Replacing traditional forest managers with ecologists and wildlife biologists, timber targets with *environmental* goals does not address the fundamental dynamics of delegitimation.

The opportunity that ecosystem management presents for the Forest Service is multidimensional and in important respects not clear or even determinable. The development of the ecosystem management concept can rightfully be described as a social learning process. Inherent in the idea is the recognition of linkages--between ecosystem processes and resources and between the social and natural worlds. Also inherent is the recognition that cross-ownership cooperation is essential to meeting the goals we would set for successful ecosystem management. In other words, ecosystem management acknowledges at least at some levels the complexity of the world and the interdependence of its parts.

However, the established management regime has not failed only because it did not recognize complexity and interdependence or couldn't deal with it technically, but because it did not understand what its actual function in society was. It has been usual and understandable for the Forest Service and the other resource agencies to believe that their role was to manage stuff. Resources that is. This belief obscured the reality that the agencies managed, created, affected, and took part in the relationships among various social actors. The resources certainly were a part of this and inseparable from the social relationship—as a kind of actor albeit not a human one. The inability to recognize its role as primarily a social one has made the Forest Service more vulnerable than it need have been to changes in the social environment that could undermine its legitimacy and threaten its existence.

The main opportunity of the moment then is not to develop a better, more comprehensive, more technically accomplished management strategy for the national forests and other public lands. It is to reflect critically through review, experimentation, and conversation what the role of the Forest Service and the other agencies is and should be in American society. The ecosystem management discourse has emerged out of a crisis of legitimacy, it would be short sighted not to take advantage of the unique possibilities that a period of crisis affords. Crisis after all reflects and may lead to dissolution where conditions and institutions are not well formed, defined, demarcated. One would not want to rush a reformation without being confident that the factors that led to the initial crisis had been adequately dealt with.

On the other hand, there is a real danger in the contemporary political environment that the Congress and the social movements that affect the

agencies will not tolerate an extended period of experimentation and learning. The agency's long term survival can by no means be assured if only it is critical and creative for a number of years of decades. This risk cannot be avoided but it cannot be used as an excuse to make major decisions based solely on political expediency. Short term political expediency is not likely to help the agency survive and flourish in the long term because the sources of its problems come out of long term social and environmental trends.

One hopeful sign for the agency is that many employees and observers recognize certain governance imperatives that are compatible with political currents that led to the victory of Republicans in the latest congressional election. These currents can be used in ways their loudest proponents do not intend but the most thoughtful observers want to promote. Most importantly, the Forest Service must decentralize decision making and even policy making authority. This is a recognized need of long standing, but as "devolution" involves a diffusion and giving up of power it is a very difficult step to take. Any such decentralization should and probably inevitably would include an intense and rigorous internal dialogue about the nature and function of leadership in the service.

Another imperative that coincides with the contemporary political discourse is the need to deal with interrelated issues simultaneously. We want it all: a healthy environment and a vigorous economy, forest products and beautiful recreational and wildlife areas, community stability and dynamic and innovative change. We have discovered over the course the last several decades that in order to have any one of these things we need to have the

other. You can't eat your cake without having it. Ecosystem management in all its diverse manifestations represents a step in this direction.

Finally, less frequent debated but not therefore of any less importance, is the recognition that the role of science in making policy and shaping society has come into question over the course of the past several decades. The political role of science has been recognized, even if not by all. The limits of science are more easily acknowledged. The covert exertion of power through science can no longer be denied. These understandings, far from being discouraging, present an excellent opportunity to clarify and modify the relationship between science, policy, and politics in the context of our political system, and to make more rational decisions in the future. Ecosystem management, with its emphasis on learning and adaptation, and on public participation in technically intensive decision making--or more accurately, democratic process--incorporates the conceptual potential to deal with the science/ politics knot.

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